Setting the Federal Stage: Developing a National Digital Information Infrastructure for Preservation

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Time and accident are committing daily havoc on the originals deposited in our public offices. ... The lost cannot be recovered; but let us save what remains; not by vaults and locks which fence them from the public eye and use, in consigning them to the waste of time, but by such a multiplication of copies, as shall place them beyond the reach of accident.

--Thomas Jefferson to Ebenezer Hazard, February 18, 1791

The Challenge

Libraries and archives must ensure access to digital collections in an environment of exponential growth and volatile technology.

Background

May 1996 – Commission on Preservation and Access and The Research Libraries Group published *Preserving Digital Information.*

July 2000 – National Academy of Science published *LC21: A Digital Strategy for the Library of Congress.*

December 2000 - Congress provided a special appropriation for development of National Digital Information Infrastructure and Preservation (NDIIP) program.

National Digital Information Infrastructure and Preservation Program (NDIIP)

- Part of Consolidated Appropriations Act Fy2001
- Federal partners jointly assess planning considerations
- Strategy to be executed in cooperation with library, creative, publishing, technology, and copyright communities nationally and internationally

NDIIP Strategic Planning

- Library of Congress to develop and execute Congressionally-approved strategic plan ($25 million total)
  - Initial planning
  - Acquisition and preservation of digital information that might otherwise "be uncollectible"
- Federal funding available for matching by non-federal donations, including in-kind contributions, through March 31, 2003 ($75 million)

Digital preservation raises issues that cannot be addressed fully within the walls of any one institution.

--LC21, July 2000

Joint and Participating Partners

- Federal and private, libraries and archives, research and business organizations
- Expertise in telecommunications and e-commerce policy and practices
- Expertise in collection and maintenance of archives of digital materials
- Involved in efforts to preserve, collect and disseminate digital information

Opportunities for Partnerships

- Promote development of solutions for digital libraries and archives
- Exploit infrastructure technologies being developed for e-commerce and e-government
- Pursue value from existing research partnerships
- Develop standards and best practices
- Cooperate with a variety of communities with related interests

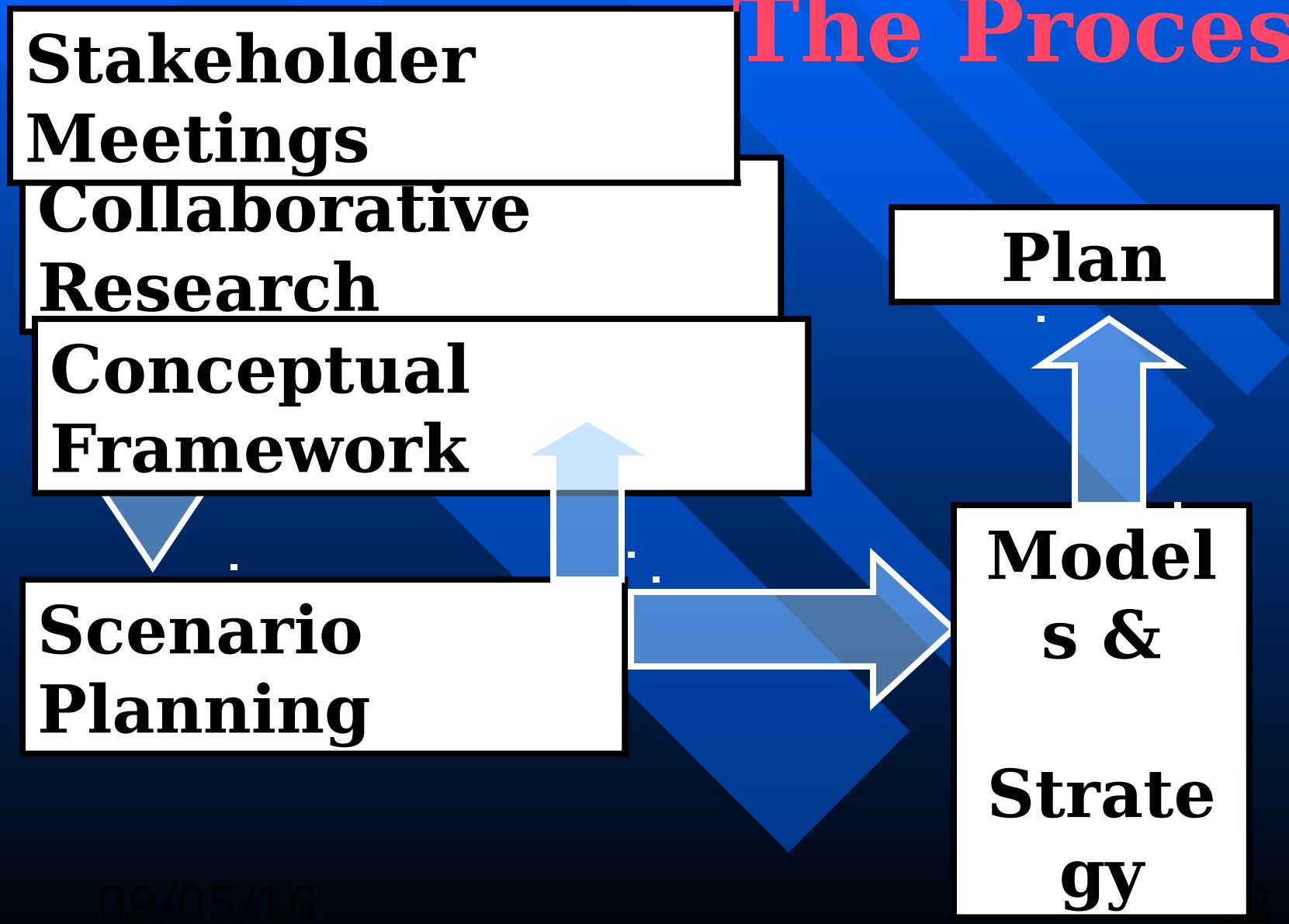
NDIIP Timeline: 2001

- Assemble National Digital Strategy Advisory Board
- Convene communities of stakeholders
- Establish management structure
- Establish digital strategy framework

The Process

- Stakeholder Meetings
- Collaborative Research
- Conceptual Framework
- Scenario Planning
- Models and Strategy
- Plan

The Process


Stakeholder Meetings
Collaborative Research
Conceptual Framework
Scenario Planning
Models & Strategy
Plan

Preserving information in digital forms is much more difficult than preserving information in forms such as paper and film. This is not only a problem for traditional archives, but also for many organizations that have never thought of themselves as performing an archival function.

--Reference Model for an Open Archival Information System (OAIS) Draft, July 2001

Stakeholder Communities

- Media/Entertainment
- Print publishers
- University/research scholars
- University/research libraries
- Preservation agencies
- Creators
- Users
- Government agencies

NDIIP Timeline: 2002

- Submit proposed plan for Congressional approval
- Recommend approaches to developing partnerships
- Establish partnerships and begin major projects
- Begin modeling and testing preservation framework with partners

Collaborative Research

- **Process**
  - NSF-sponsored workshop on long-term preservation of digital objects (Spring 2002)
  - Broad participation of federal agencies in needs statement
- **Outcomes**
  - Call for proposals (Fall 2002)
  - Funding partnerships
  - Research results (3 to 5 years out)

Conceptual Framework

- **Process**
  - Survey digital preservation efforts nationally and internationally
  - Assess current state and use of technologies
- **Purpose**
  - Establish framework for discussions and decisions
  - Clarify areas of responsibility and relative roles
  - Support planning and funding initiatives
  - Promote understanding of NDIIP activities

NDIIP Timeline: 2003

- Achieve goal of matching $75 million
- Evaluate work to date and provide long-term recommendations to Congress for 2003 and beyond

Long-term preservation of digital information on a scale adequate for the demands of future research and scholarship will require a deep infrastructure capable of supporting a distributed system of digital archives.

--*Preserving Digital Information*, Task Force on Archiving of Digital Information, May 1, 1996

National Infrastructure Planning

- Cooperative, networked, distributed
- Roles and responsibilities
- Legal issues
- Preservation and access
- Economic models
- User community
- Technical solutions

The NDIIP is developing a framework for national information infrastructure for preservation of digital materials through a network of partners in library and publishing communities, federal agencies and private-sector business organizations.